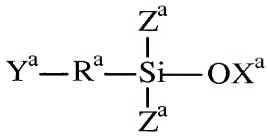
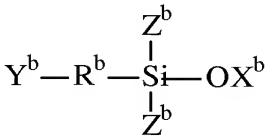


wherein R^a is C_1-C_6 alkylidene, C_1-C_6 alkylene, arylene, or a direct bond; Y^a is C_1-C_6 alkyl, C_2-C_6 alkenyl, C_{2-6} alkynyl , C_6-C_{20} aryl, 3-methacryloxy, 3-acryloxy, 3-aminoethyl-amino, 3-amino, $-SiZ^a{}_2OX^a$, or $-OX^a$; X^a is independently, in each occurrence, a C_1-C_6 alkyl or C_2-C_6 acyl ; and Z^a is C_1-C_6 alkyl, C_2-C_6 alkenyl, C_{2-6} alkynyl, C_{6-20} aryl, or $-OX^a$, with the proviso, that at least one of Y^a, Z^a or X^a is ethylenically unsaturated,

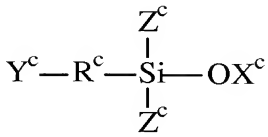
(b) 5 to 40 mole percent



wherein R^b is C_1-C_6 alkylidene, C_1-C_6 alkylene, arylene, or a direct bond; Y^b is C_1-C_6 alkyl, C_2-C_6 alkenyl, C_{2-6} alkynyl, C_6-C_{20} aryl, 3-methacryloxy, 3-acryloxy, 3-aminoethyl-amino, 3-amino, $-SiZ^b{}_2OX^b$, or $-OX^b$; X^b is independently, in each occurrence, a C_1-C_6 alkyl or C_2-C_6 acyl ; and Z^b is C_1-C_6 alkyl, C_2-C_6 alkenyl, C_{2-6} alkynyl, C_{6-20} aryl, or $-OX^b$, provided at least one of Y^b, Z^b or X^b comprises an aromatic ring,

(c) a latent acid catalyst; and

(d) 0 to 45 mole percent



wherein R^c is C_1-C_6 alkylidene, C_1-C_6 alkylene, arylene, or a direct bond; Y^c is C_1-C_6 alkyl, C_2-C_6 alkenyl, C_{2-6} alkynyl, C_6-C_{20} aryl, 3-methacryloxy, 3-acryloxy, 3-aminoethyl-amino, 3-amino, $-SiZ^c{}_2OX^c$, or $-OX^c$; X^c is independently, in each occurrence, a C_1-C_6 alkyl or C_2-C_6 acyl ; and Z^c is C_1-C_6 alkyl, C_2-C_6 alkenyl, C_{2-6} alkynyl, C_{6-20} aryl, or $-OX^c$, provided at least one of Z^c or the combination of R^c-Y^c comprises a C_{1-6} alkyl group,

said mole percent is based on total moles of silanes (a), (b) and (d) present.

4. (Original) The composition of claim 1 comprising both a photoacid generator and a thermal acid generator.

5. (Original) The composition of claim 1 wherein the group containing an aromatic ring is a phenyl or anthracenyl group.

6. (Original) The hydrolyzed or partially hydrolyzed product of a combination of silanes according to any one of claims 1-5.

7. (Currently amended) A method comprising

providing a substrate,

forming a first layer on the substrate, wherein the first layer has a dielectric constant of less than 3.0 and comprises an organic, inorganic or hybrid polymer,

applying an organosilicate composition over the first layer, and

~~hydrolyzing (~~curing~~)~~ the organosilicate composition to form an organosilicate resin layer,

applying a second layer of a low dielectric constant organic, inorganic or hybrid polymer over the organosilicate layer

characterized in that the organosilicate composition is a composition ~~according to any one of claims 1-5~~ comprising a latent acid catalysts and the following silanes or the hydrolyzed or partially hydrolyzed product of the following silanes:

(a) an alkoxy or acyloxy silane having at least one group containing ethylenic unsaturation which group is bonded to the silicon atom (b) an alkoxy or acyloxy silane having at least one group containing an aromatic ring which group is bonded to the silicon atom, and (c) optionally an alkoxy or acyloxy silane having at least one C_1-C_6 alkyl group bonded to the silicon.

8. (Previously presented) A method according to claim 7 wherein multiple layers of the organosilicate composition are formed and cured.

9. (currently amended) A method of forming an antireflective coating on a substrate comprising:

providing a substrate,

depositing and curing two or more layers of ~~applying an~~ organosilicate composition in a layer over at least a portion of the substrate or over one or more intermediate layers applied over said substrate, and

~~hydrolyzing (curing) the organosilicate composition to form an organosilicate resin,~~

characterized in that each layer of ~~the~~ organosilicate composition differs in light absorption properties from an adjacent layer and comprises a latent acid catalyst and the following silanes or the hydrolyzed or partially hydrolyzed product of the following silanes (a) an alkoxy or acyloxy silane having at least one group containing ethylenic unsaturation which group is bonded to the silicon atom

(b) an alkoxy or acyloxy silane having at least one group containing an aromatic ring which group is bonded to the silicon atom, and

(d) optionally an alkoxy or acyloxy silane having at least one C_1-C_6 alkyl group bonded to the silicon

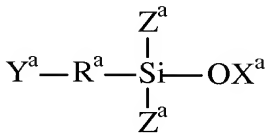
~~is a composition according to any one of claims 1-5~~.

10. cancelled

11. (new) The method of claim 7 wherein the first silane (a) is a vinyl acetoxy silane and the second silane (b) is an arylalkoxysilane.

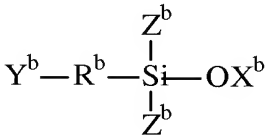
12. (new) The method of claim 7 wherein the organosilicate composition comprises the following silanes or the partially hydrolyzed product of the following silanes

(a) 50-95 mole percent silanes of the formula



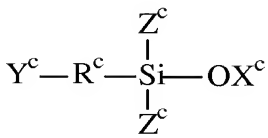
wherein R^a is C_1-C_6 alkylidene, C_1-C_6 alkylene, arylene, or a direct bond; Y^a is C_1-C_6 alkyl, C_2-C_6 alkenyl, C_{2-6} alkynyl , C_6-C_{20} aryl, 3-methacryloxy, 3-acryloxy, 3-aminoethyl-amino, 3-amino, -$SiZ^a_2OX^a$, or -OX^a; X^a is independently, in each occurrence, a C_1-C_6 alkyl or C_2-C_6 acyl ; and Z^a is C_1-C_6 alkyl, C_2-C_6 alkenyl, C_{2-6} alkynyl, C_{6-20} aryl, or -OX^a, with the proviso, that at least one of Y^a, Z^a or X^a is ethylenically unsaturated,

(b) 5 to 40 mole percent



wherein R^b is C_1-C_6 alkylidene, C_1-C_6 alkylene, arylene, or a direct bond; Y^b is C_1-C_6 alkyl, C_2-C_6 alkenyl, C_{2-6} alkynyl, C_6-C_{20} aryl, 3-methacryloxy, 3-acryloxy, 3-aminoethyl-amino, 3-amino, -$SiZ^b_2OX^b$, or -OX^b; X^b is independently, in each occurrence, a C_1-C_6 alkyl or C_2-C_6 acyl ; and Z^b is C_1-C_6 alkyl, C_2-C_6 alkenyl, C_{2-6} alkynyl, C_{6-20} aryl, or -OX^b, provided at least one of Y^b, Z^b or X^b comprises an aromatic ring; and

(c) 0 to 45 mole percent



wherein R^c is C_1-C_6 alkylidene, C_1-C_6 alkylene, arylene, or a direct bond; Y^c is C_1-C_6 alkyl, C_2-C_6 alkenyl, C_{2-6} alkynyl, C_6-C_{20} aryl, 3-methacryloxy, 3-acryloxy, 3-aminoethyl-amino, 3-amino, -$SiZ^c_2OX^c$, or -OX^c; X^c is independently, in each occurrence, a C_1-C_6 alkyl

or C_2-C_6 acyl ; and Z^c is C_1-C_6 alkyl, C_2-C_6 alkenyl, C_{2-6} alkynyl, C_{6-20} aryl, or -OX^c, provided at least one of Z^c or the combination of R^c-Y^c comprises a C_{1-6} alkyl group,

said mole percent is based on total moles of silanes (a), (b) and (c) present.

13. (new) The method of claim 7 wherein the organosilicate composition comprises both a photoacid generator and a thermal acid generator.

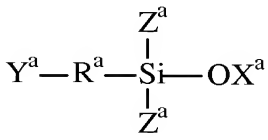
14. (new) The method of claim 7 wherein the group containing an aromatic ring is a phenyl or anthracenyl group.

15. (new) The method of claim 9 wherein at least two of the two or more layers of the organosilicate have different curing mechanisms.

16. (new) The method of claim 9 wherein for at least one of the layers of organosilicate composition the first silane (a) is a vinyl acetoxy silane and the second silane (b) is an arylalkoxysilane.

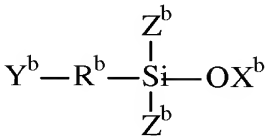
17. (new) The method of claim 9 wherein for at least one of the layers of organosilicate, the organosilicate composition comprises the following silanes or they hydrolyzed or partially hydrolyzed reaction product of the following silanes

(a) 50-95 mole percent silanes of the formula



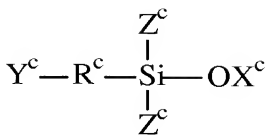
wherein R^a is C_1-C_6 alkylidene, C_1-C_6 alkylene, arylene, or a direct bond; Y^a is C_1-C_6 alkyl, C_2-C_6 alkenyl, C_{2-6} alkynyl , C_6-C_{20} aryl, 3-methacryloxy, 3-acryloxy, 3-aminoethyl-amino, 3-amino, -$SiZ^a_2OX^a$, or -OX^a; X^a is independently, in each occurrence, a C_1-C_6 alkyl or C_2-C_6 acyl ; and Z^a is C_1-C_6 alkyl, C_2-C_6 alkenyl, C_{2-6} alkynyl, C_{6-20} aryl, or -OX^a, with the proviso, that at least one of Y^a, Z^a or X^a is ethylenically unsaturated,

(b) 5 to 40 mole percent



wherein R^b is C_1-C_6 alkylidene, C_1-C_6 alkylene, arylene, or a direct bond; Y^b is C_1-C_6 alkyl, C_2-C_6 alkenyl, C_{2-6} alkynyl, C_6-C_{20} aryl, 3-methacryloxy, 3-acryloxy, 3-aminoethyl-amino, 3-amino, -$SiZ^b_2OX^b$, or -OX^b; X^b is independently, in each occurrence, a C_1-C_6 alkyl or C_2-C_6 acyl ; and Z^b is C_1-C_6 alkyl, C_2-C_6 alkenyl, C_{2-6} alkynyl, C_{6-20} aryl, or -OX^b, provided at least one of Y^b, Z^b or X^b comprises an aromatic ring, and

(c) 0 to 45 mole percent



wherein R^c is C_1-C_6 alkylidene, C_1-C_6 alkylene, arylene, or a direct bond; Y^c is C_1-C_6 alkyl, C_2-C_6 alkenyl, C_{2-6} alkynyl, C_6-C_{20} aryl, 3-methacryloxy, 3-acryloxy, 3-aminoethyl-amino, 3-amino, $-SiZ^c_2OX^c$, or $-OX^c$; X^c is independently, in each occurrence, a C_1-C_6 alkyl or C_2-C_6 acyl ; and Z^c is C_1-C_6 alkyl, C_2-C_6 alkenyl, C_{2-6} alkynyl, C_{6-20} aryl, or $-OX^c$, provided at least one of Z^c or the combination of R^c-Y^c comprises a C_{1-6} alkyl group,

said mole percent is based on total moles of silanes (a), (b) and (d) present.

18. (new) The method of claim 9 wherein for at least one of the layers of organosilicate composition the group containing an aromatic ring is a phenyl or anthracenyl group.